USDA United States Department of Agriculture

Natural Resources Conservation Service

If I can do it here, you can do it anywhere.

Cade Bushnell farms 1,200 acres in Northern Illinois in Ogle County. His son Ross farms alongside him, with his own 300 acres and a small livestock operation. Cade's been living on this land since he was a boy and has farmed it since 1982. Both Cade and Ross are conservation farmers who work the land but who care for it as well. Where did Cade learn this love of the land, this raw appreciation for the soil?

Cade's father, Fred, was an agronomist for the Del Monte company who later became a farmer himself. When he did that back in the 1950's, he entered into it without any farming history or preconceived notions. He was a trained Agronomist and he used what he knew to do the best he could. Early on, he installed contours, terrace systems, grassed waterways, and built wooden grade stabilization structures on his rolling Ogle County fields. Pretty progressive back then.

Making a living as a farmer in the 1950s and 1960's was tough, so Fred tapped into USDA loans when he needed to and learned early the importance of keeping detailed records to systematically track inputs and yields and all the details of the operation. The Bushnell family learned quickly that USDA was here to help with technical and financial assistance. Fred purchased and used a Grandhome Plow for his farm—this implement was the precursor to the chisel plow and using it raised a few eyebrows. Son Cade was just a boy in the 1970s when Fred started farming no-till, getting more odd looks and cold resistance from other local farmers.

Cade grew up on the farm surrounded by the sound agronomic principles of his father. He knew what it was like to be referred to as the son of "that guy" who did things a little different on his land. Fred was a smart man and someone who always saw himself as a student. He passed that on to Cade too. "It's not a failure if you learn something, he always said. He taught me not to be afraid to try things, to keep learning." Cade calls them his 'accidental test plots'—experiments where he tries something new on a small field or a few acres. Whether it works or not, he knows he's learned something.

Cade's commitment went beyond maintaining his father's established conservation structural and management practices on the family farm. In 1991, Cade started planting cover crops using a 35' disk and went 100% no-till on all his acres. According to Cade, the decision to go no-till is

a big one. "It's not just not tilling the fields anymore. There's so much more involved. And it's not something you perfect in a year or two."

Like his Father, Cade used help from USDA's Natural Resources Conservation Service (NRCS) and other partners when it made sense for him. In 2008, he developed a Forest Management Plan using the Environmental Quality Incentives Program (EQIP). In 2010, his Conservation Stewardship Program (CSP) contract let him experiment with drift-reducing technologies and he renewed CSP in 2014 to do more cover crops and use split Nitrogen applications.

Over the years, when Cade looked to acquire new ground for the farm, he looked for landlords based on their involvement with the farm operation. Were the soils good? Didn't matter. What Cade values is the freedom to keep doing no-till and using techniques and strategies other farmers haven't taken up yet. He knows the right tactics can accomplish his goals and that he can be productive and profitable and follow his family's agronomic history of stewardship.

With cropland in northern Illinois, cooler soil temperatures and a shorter window for establishing cover crops complicates the ag equation even more. "You've only got October through December," Cade explains, "And that's if you're lucky. This year harvest was delayed and then we had equipment issues and replacement part problems. You do what you can. A lot of rye didn't emerge in the fall but once it's in and takes off in the spring, you've got what the soil needs."

There's no doubt Cade believes in no-till and cover crops. He's planted covers with aerial seeding, spreaders, and even while soybeans were still growing. His favorite technique? Using his 750 no-till drill, with autosteer and GPS.

In the 2000's, while experimenting with ways to increase organic matter, Cade chose to plant corn-on-corn because soybeans offer so little residue, compared to corn. It can be risky and requires high management, but that's when he first tried using strip-till.

"Strip-till gives corn the space it needs to thrive, and it controls erosion well. But you can't use it on fields planted on the contour," Cade explains. Another lesson learned.

Cade calls himself a student but he's also a teacher, passing on information and experience to not only son Ross, but agricultural students at local high schools and community colleges. These

students and a host of other friends and supporters help Cade plant cover crops or plant crops. It gives them a chance to see things, do things, get work accomplished in shorter window—and best of all, it helps everybody learn.

Like most farmers, Cade's soils are variable—they range from Drummer silty clay loam to Blowsand soils and everything in between. But with consistent use of no-till and cover crops, all soils improve and grow healthier with each passing year.

"My motto is a simple one—get the maximum yield you can and cause minimal environmental damage," Cade explains.

To learn more about NRCS conservation programs and practices, visit www.il.nrcs.usda.gov or visit your local county USDA Service Center today.